

Tackle complexity in the new world of manufacturing

The next-generation CNC: FS500i-A



Optimised for performance

The new FS500*i*-A offers several important innovations. For instance, operators are set to benefit from FANUC's new *i*HMI2 CNC interface, which maintains the appealing look and feel of FANUC's *i*HMI but combines it with the familiar operability of legacy systems. For every task, all interactions can be handled on one screen so that there is no need to jump between several of them. The FS500*i*-A also provides the potential to program PMC (programmable machine control) systems using ISO-defined Structured Text language, while a further new function is the simplification of processes that require programming in five axes. Specifically, using a special tool, the FS500*i*-A offers the ability to accommodate any arbitrary machine kinematics.

FS500i-A series Features and Benefits

Features

- Renewal of basic structure from 30*i* series
- Further enhanced machining performance and reliability
- Five-axes Integrated Technology
- Newly designed control unit and operation screen
- Enriched customisation functions
- Advanced information security, network technology and safety
- ullet Enhanced machining performance and usability with $lpha i ext{-D}$ series SERVO system

* αi -B servo and older models cannot be used with Series 500i-A.





Enhanced Performance and Reliability

Maximise your machining performance and drive cycle time reductions due to the dual engine architecture, a new CPU and complete renewal of the hardware and software, combined with newly introduced features and capabilities.

Enhanced performance

- 2.7 times higher CPU processing power (than 30*i*-B Plus)
- enhanced graphic for LCD-mounted CNC
- higher speeds of various interfaces

Enhanced reliability

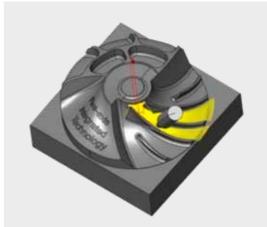
- battery-less CNC system
- enhanced maintainability
- easy to maintain hardware

Increased high speed and high precision performance

thanks to the next generation drive system – FANUC αi -D series SERVO

- better surface and increased spindle time
- same performance with less electricity consumption
- energy savings and reduced carbon footprint:
- integrated energy recovery system
- 10% reduction in power dissipation
- less space





Easy-to-use 5-axis Machining Function

Higher usability of 5-axis machining functions thank to the support of digital technology and a new machine configuration setting tool. Allows further process integration and enhanced productivity.

5-axis machining - new functionalities:

- manual operation in the workpiece set-up
- built-in 3D interference check and continuous tool length compensation at the CNC/Servo Control
- improved usability of command during the machining



Improved Display Performance and Usability

The new screen operation system FANUC *i*HMI2 enables you to control the CNC screen and various applications easily. It's fully customizable by using FANUC PICTURE 2 and the auto-scaling functionality fits various screen sizes. Furthermore, it can be viewed from a web browser on a mobile device connected to the network.

Get further efficiency for set-up and machining operations

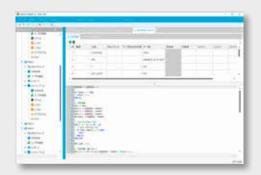
One task one screen, no need to switch between screens, including rich touch gestures, intuitive operation. Reduce your operation time and shorten your work time!

Create customised screens easily with FANUC PICTURE2

Reduce your work in screen development by new user interface and rich parts. The all-new user interface strongly supports the screen designing and debugging. The basic screen parts (tree, table, etc.) have been expanded and utilize the 500*i*-A operation screen for your screen development:

- using screen parts on machine tool builder's screens
- screen customization based on 500i-A operation screen

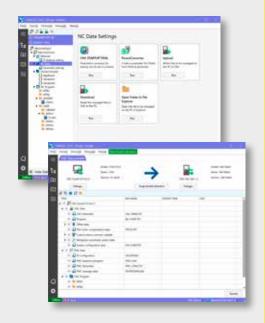




Fast PMC development with IEC Structured Text

The newly designed User Interface, PMC Program Design, and Structured Text (ST) Language accelerate PMC development:

- uniform operability as PMC screens on the CNC
- IEC standard ST language
- various IEC standard Data types
- variable based programming
- project management of multiple programs and data



Your Digital Design Support - FANUC CNC Design Studio

Leverage the strong support of digital design by Digital Twin. Create simulations of all machine processes, even high-speed ones, in a safe and reliable way. The CNC Design Studio integrates and cooperates several setting tools:

- PMC Programmer
- FANUC PICTURE 2
- Acceptance Test Support Tool
- CNC Startup Tool

Your benefits:

- centralizes data necessary for electrical design by project management
- setting tools integrated and cooperated with CNC Design Studio
- realizes batch transfer to multiple CNC's and data copy between CNC/CNC GUIDE